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The Corn-Crib or Slat-Fence Silo

Stack Silage

Corn-crib or slat-fence material can be used in making a temporary silo.

Silos constructed of such material are relatively inexpensive and can be set up quickly.

Green bundle corn can also be stacked in such a way as to produce silage of satisfactory quality.

UNIVERSITY OF MINNESOTA
AGRICULTURAL EXTENSION DIVISION

The Corn-Crib or Slat-Fence Silo

Silos made of corn-crib slatting or snow-fence material provide an inexpensive means of storing silage for livestock feeding. Many silos of this kind have been used in southern Minnesota with good results. The corn-crib silo does not take the place of the permanent silo, but it gives the man who has no silo a means of providing silage for his stock at very small expense.

Location

The slat-fence silo should be placed convenient to the place at which the silage is to be fed. It is important that the silo be constructed on level ground. Unless this is done, the silage is likely to settle unevenly causing the crib to lean or even topple over. If ground is uneven it should be leveled before setting up the silo. The silo should not be set where there is danger of water standing or snow drifting.

Materials

Either corn-crib slatting or the regular snow-fence slatting may be used. In either case, it is advisable to line the silo with waterproof building paper. Ordinary building paper absorbs water and tears easily. Consult your dealer regarding paper for lining. It is estimated that paper lining will more than pay for itself in the silage saved.

Corn-crib or slat-fence material comes in rolls varying in length from 50 to 100 feet and is generally 4 feet in width.

Size of Silo

For best results, the slat-fence silo should be at least 16 feet in diameter, tho 18 to 20 feet is much

better. The height is important since added height gives more pressure, and the greater the pressure the better the silage will keep. For best results, the silo should be at least 20 feet high. If greater height is desired, it will be necessary to support the silo with three or four poles, either tree trunks or old telephone poles set three feet into the ground and extending to the top of the silo. Fasten the top of the poles together with heavy wire. Additional support should be given the poles by running wire around the outside of the poles at intervals of 5 to 6 feet. If increased capacity is desired, or if poles are not easily obtained, increase the diameter of the silo rather than build it more than 20 feet high.

How to Construct

To make a silo 20 feet in diameter and 20 feet in height, splice together three 100-foot rolls or six 50-foot rolls of the slat fencing. Splice carefully, as there is considerable lateral pressure especially in the two bottom sections of the silo. After the rolls are safely spliced, cut off the following lengths making 5 sections, each a little smaller than the other so that the smaller sections above may telescope into those below as the silage settles:

Section 1	(bottom)	66 ft. 3 in.
Section 2		63 ft. 2 in.
Section 3		60 ft.
Section 4		56 ft. 10 in.
Section 5		53 ft. 9 in.

These lengths will give a diameter of 21 feet for the bottom section, and a diameter of 17 feet for the top section. The capacity of such a silo will be about the same as that of a regular silo 14 feet in diameter and 36 feet high.

Cost Easily Determined

The cost of such a silo will depend on the size, whether silo is supported by poles as outlined above, and whether paper is used for lining. The material, except paper, in such a silo may be used for several years, which will greatly reduce the annual cost.

Filling the Silo

The corn, to keep well in a slat silo, should be green, cut fine, and well packed. Finely cut corn contains less air space and holds moisture better. The driest corn should be placed in the bottom of the silo where pressure is greatest. In a slat silo packing is very important. Especially is it important to pack the outside edge, around the silo wall. Two men can well be used in packing. Never put corn that is badly dried in a slat silo. Frosted corn that is green can be used if it is cut and hauled in immediately.

MAKING STACK SILAGE

Good ensilage can be made by stacking green bundle corn in large stacks. In making stack ensilage it is important that the corn be green. Corn that is beginning to get dry may keep well in a silo but is very likely to spoil when stacked. Frosted corn may be used providing it is cut and stacked immediately after freezing.

Location of Stack

Since silage is to be fed daily, it is important to locate the stack near the place of feeding. To prevent the stack from leaning and to insure equal pressure, the stack should be placed on level ground. It is not a good plan to place the stack where there is danger of water settling or snow drifting, as this causes extra labor in feeding during the winter.

Size of Stack

The percentage of loss is greater in small stacks. As a rule the stacks should not be smaller than 18 or 20 feet in diameter and about the same in height. However, it is better to have a stack with a smaller diameter and maintain the height, if enough corn is not available to make a larger stack. Narrow high stacks are hard to keep from settling to one side unless very carefully built. Good height, however, is very important as it gives more pressure, which helps to preserve the silage.

Building the Stack

In building a stack, lay the outside row of bundles first, then work in toward the center laying the bundle butts out; lap the bundles just enough to bind the stack together. Lay bundles close together and pack them well. Always keep the center of the stack lower than the outside. The driest corn should be placed at the bottom or in the center of the stack. It is best to unload at different points around the stack, because if corn is pitched only on one side the stack will settle unevenly, exposing more surface and increasing the loss. Small bundles pack closer and make easier work. When the stack becomes too high to pitch bundles from the wagon, a platform may be built, upon which a man can stand and pass the bundles to the stacker. Where much corn is to be stacked, a derrick with a swinging arm for unloading the corn lightens the work. With the use of a derrick and rope slings, the corn can be lifted to any height. To insure even stacking, it is important to drop the corn in the middle of the stack. In a properly constructed stack the bundles should all

slope toward the middle. The finished stack should be perfectly flat on top. No cover is necessary.

Feeding the Silage

In feeding, remove the spoiled part on top, usually not more than a foot in depth. The butts of bundles on the outside will be rotted inward from 8 to 12 inches. This, also, should be removed as the stack is lowered in feeding. In cold weather keep the top covered with 12 to 18 inches of coarse hay or straw. This can be laid back until the day's feed is thrown off and then replaced to prevent freezing.

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